For Residential and Commercial Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

SunTouch® TapeMat® 120 and 240 Voltages

SunTouch TapeMats are a series resistance heating cable assembly installed over plywood, backer board, or concrete slab (according to ANSI or TCNA guidelines), and then embedded in 3/8" (9.5 mm) or greater self-leveling or polymer-modified thin-set mortar.

Specifications

Supply Voltage	120VAC, 1-phase 240VAC, 1-phase	
Amp Draw	120VAC: 1 amp per 10 sf. 240VAC: 1 amp per 20 sf.	
Maximum Circuit Load	20 amps (15 amps with SunStat Control)	
Wire Spacing	3" (76 mm) o.c.	
Maximum Allowable Temperature	194°F (90°C) Continuously	
EMF	Less than 1 milligauss at 1/2" (12.7 mm) above surface.	
Heating Elements	Oxygen-free copper or nickel-copper	
Insulation	ETFE Fluoropolymer	
Ground	Copper	
Double-Sided Tape	3/4" (19 mm) wide, installed along both edges of mat.	
Minimum Allowable Bend Radius	1" (25 mm)	
Power Lead Length	10' (2.7 m)	

Application Parameters	√			
Watt Density		3" (76 mm) o.c.	12W/sq ft (129.0 W/m²)	
Minimum Polymer-modified Thinset		3/8" (9.5 mm)		
		Backer board over wood subfloor		
Allowable Substrate		Polymer-modified setting bed over wood subfloor		
		Polymer-modified setting bed over concrete slab		
		Thin slab/self-leveling concrete over wood subfloor		
		Thin slab/self-leveling concrete over concrete slab		
Allowable Floor Coverings		Tile/Stone		
		Carpet		
		Hardwood		

^{*} Most anti-fracture membranes are approved for use with SunTouch TapeMat. Contact manufacturer for details on specific products.

WARNING

Never cut the heating cable or damage it in any way. Use only the attachment methods as described in the Installation Manual for SunTouch TapeMat as other methods may damage the heating element.



SunTouch TapeMats are available in various lengths with voltage options of 120 or 240 VAC.

Installation Guidelines

- Measure and certify the correct wire resistance (ohms) value for the heating cables, record these readings in the chart provided in the installation manual.
- Use of manufacturer's alarm meter (LoudMouth™ meter) is recommended during installation.
- · Clean the subfloor.
- Lay out and secure SunTouch TapeMat to the floor.
- Install the floor sensor in accordance with installation manual.
- Install floor coverings as detailed in installation manual.



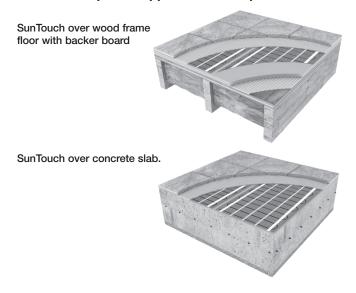
UL Listed for U.S. under UL Standard 1693 and Canada under CAN/CSA C22.2 No. 130.2-93. Listing file number E185866.

A CAUTION

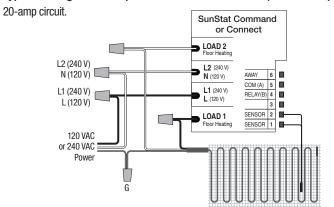
This Engineering Sheet is not intended to provide full installation instructions and safety information. In order to avoid property damage or injury, please refer to the complete installation manual and product safety information provided with the product.



SunTouch TapeMat Application Examples

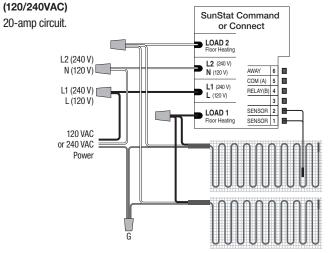


Typical Wiring for one TapeMat with SunStat Control (120/240VAC)



120 VAC or 240 VAC TapeMat (maximum 15 amps)

Typical Wiring for multiple TapeMats with SunStat Control



Two or more 120 VAC or 240 VAC TapeMats (maximum 15 amps)

120 VAC SunTouch TapeMats

√ Applicati	√ Application Parameters						
Order No.	Mat Sizes (W x L)	Total sq.ft	Reet Value*	Amp Draw			
81002183	2' x 5' (0.61 m x 1.52 m)	10	0.11	1.0			
81007233	2' x 7'-6" (0.61 m x 2.29 m)	15	0.13	1.5			
81002197	2' x 10' (0.61 m x 3.05 m)	20	0.13	2.0			
81007234	2' x 12'-6" (0.61 m x 3.81 m)	25	0.10	2.5			
81002208	2' x 15' (0.61 m x 4.57 m)	30	0.06	3.0			
81007235	2' x 17'-6" (0.61 m x 5.33 m)	35	0.13	3.5			
81002217	2' x 20' (0.61 m x 6.10 m)	40	0.10	4.0			
81007236	2' x 22'-6" (0.61 m x 6.86 m)	45	0.11	4.5			
81002226	2' x 25' (0.61 m x 7.62 m)	50	0.14	5.0			
81002234	2' x 30' (0.61 m x 9.14 m)	60	0.13	6.0			
81002240	2' x 35' (0.61 m x 10.67 m)	70	0.13	7.0			
81002246	2' x 40' (0.61 m x 12.19 m)	80	0.19	8.0			
81002184	3' x 5' (0.91 m x 1.52 m)	15	0.13	1.5			
81002188	3' x 6'-8" (0.91 m x 2.03 m)	20	0.13	2.0			
81002194	3' x 8'-4" (0.91 m x 2.54 m)	25	0.10	2.5			
81002200	3' x 10' (0.91 m x 3.05 m)	30	0.06	3.0			
81002209	3' x 15' (0.91 m x 4.57 m)	45	0.11	4.5			
81002220	3' x 20' (0.91 m x 6.10 m)	60	0.13	6.0			

240 VAC SunTouch TapeMats

√	√ Application Parameters							
	Order No.	Mat Sizes (W x L)	Total sq.ft	Reet Value*	Amp Draw			
	81002265	2' x 10' (0.61 m x 3.05 m)	20	0.11	1.0			
	81002269	2' x 15' (0.61 m x 4.57 m)	30	0.13	1.5			
	81002274	2' x 20' (0.61 m x 6.10 m)	40	0.13	2.0			
	81002279	2' x 25' (0.61 m x 7.62 m)	50	0.10	2.5			
	81002284	2' x 30' (0.61 m x 9.14 m)	60	0.06	3.0			
	81002288	2' x 35' (0.61 m x 10.67 m)	70	0.13	3.5			
	81002293	2' x 40' (0.61 m x 12.19 m)	80	0.10	4.0			
	81002407	2' x 45' (0.61 m x 13.72 m)	90	0.11	4.5			
	81002410	2' x 50' (0.61 m x 15.24 m)	100	0.14	5.0			
	81002415	2' x 60' (0.61 m x 18.29 m)	120	0.13	6.0			
	81002419	2' x 70' (0.61 m x 21.34 m)	140	0.13	7.0			
	81002422	2' x 80' (0.61 m x 24.38 m)	160	0.19	8.0			
	81002266	3' x 10' (0.91 m x 3.05 m)	30	0.13	1.5			
	81002268	3' x 13'-4" (0.91 m x 4.06 m)	40	0.13	2.0			
	81002272	3' x 16'-8" (0.91 m x 5.08 m)	50	0.10	2.5			
	81002277	3' x 20' (0.91 m x 6.10 m)	60	0.06	3.0			
	81002286	3' x 30' (0.91 m x 9.14 m)	90	0.11	4.5			
	81002406	3' x 40' (0.91 m x 12.19 m)	120	0.13	6.0			

*REET, (Radiant Electric Emissions Test), which is conducted by an independent third party test lab known as ETL Semko.



A Watts Water Technologies Company

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